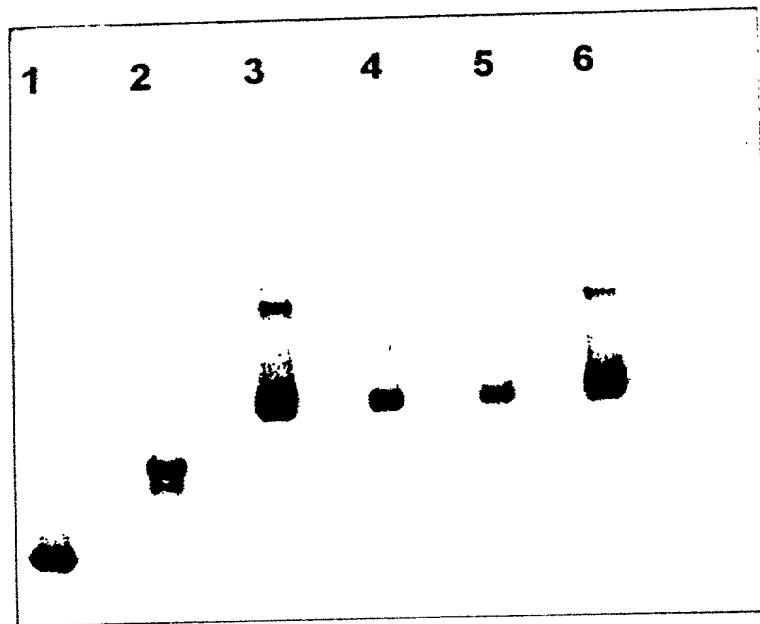
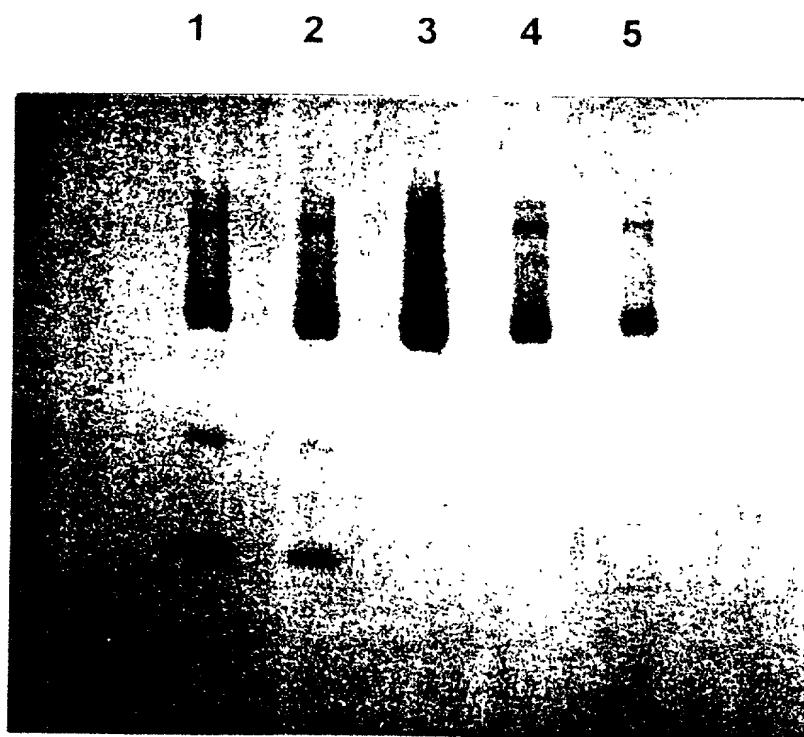


# 5

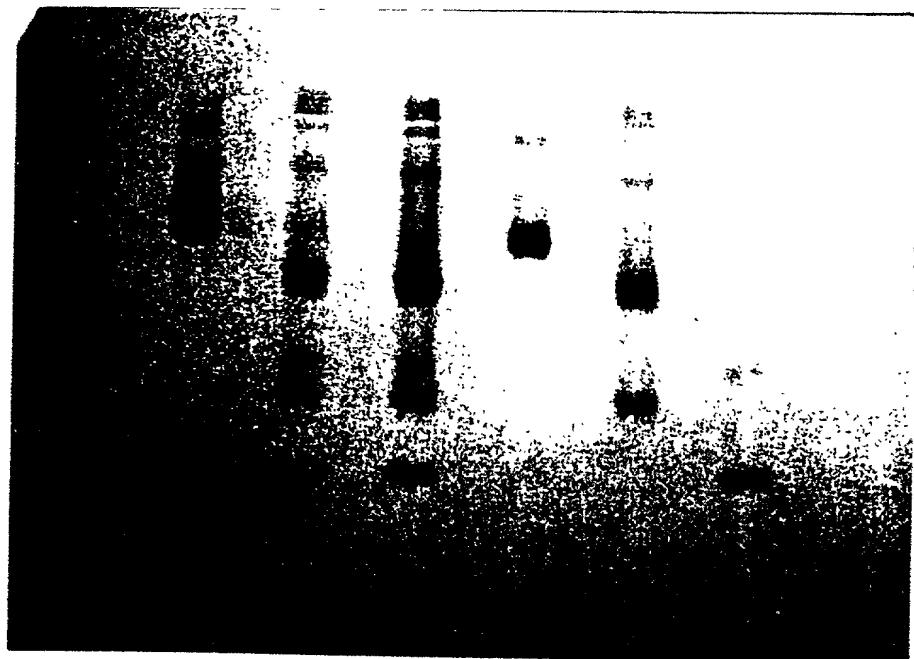


***FIG. 1***

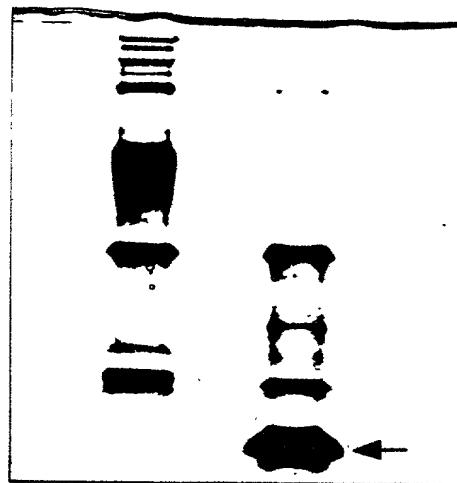


*FIG. 2*

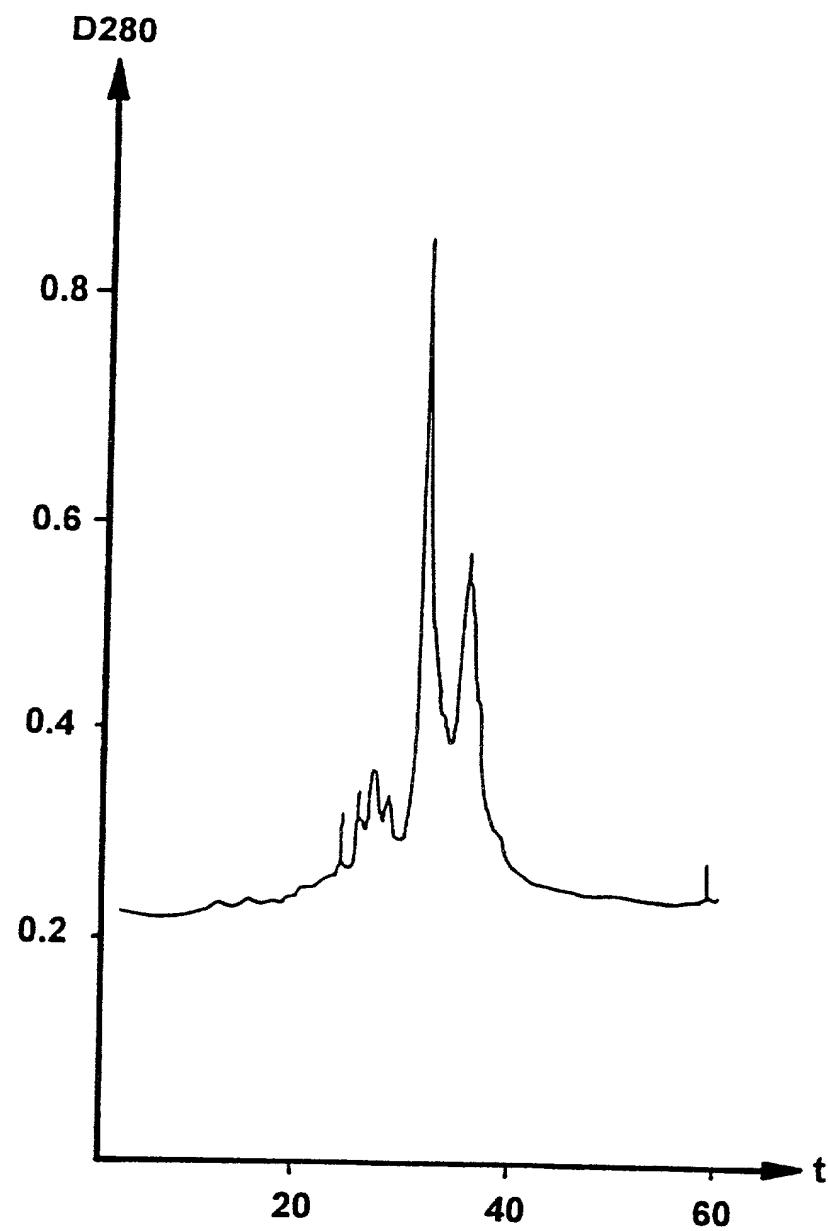
1 2 3 4 5 6



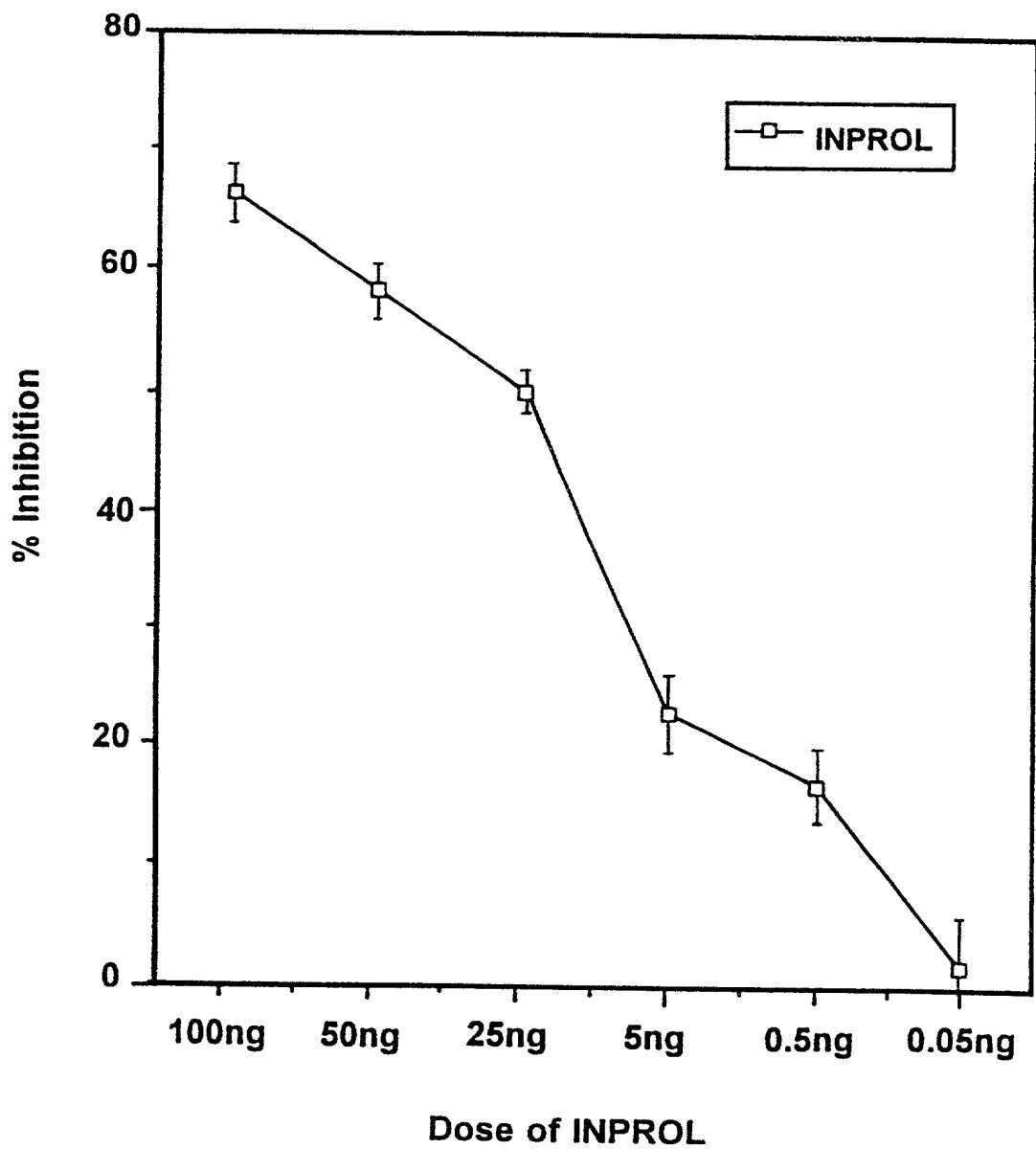
*FIG. 3*



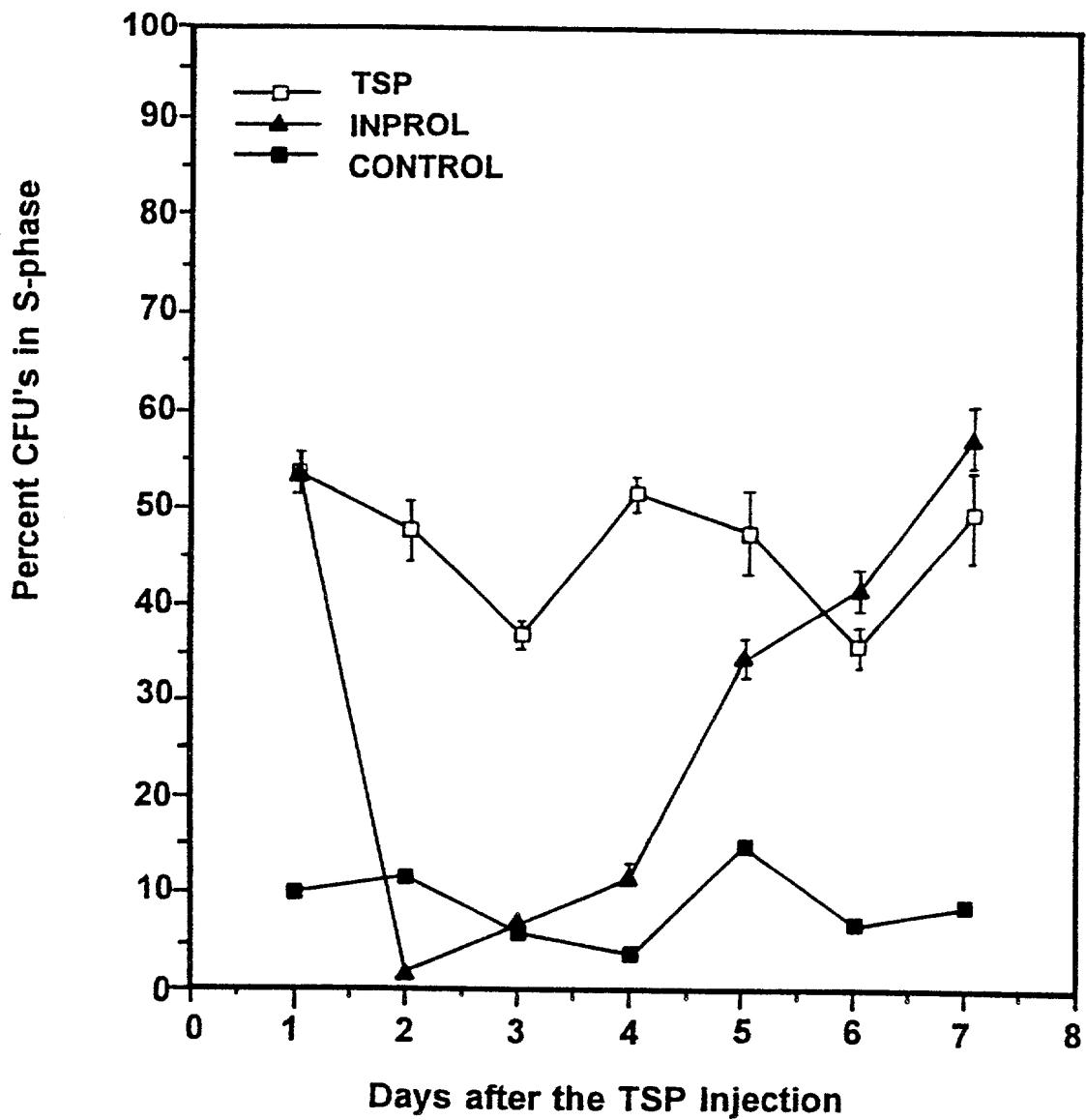
*FIG. 4*



**FIG. 5**

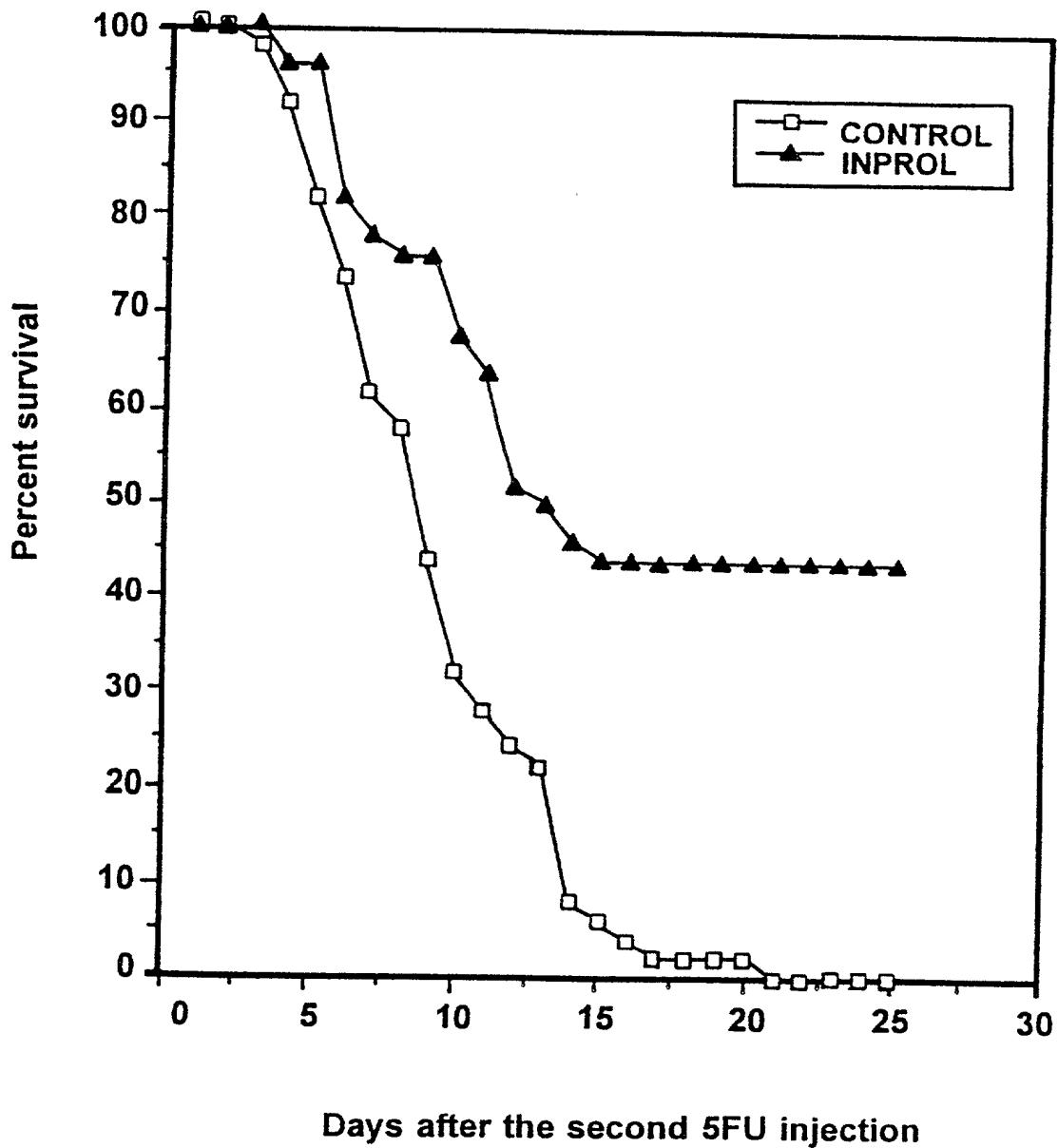


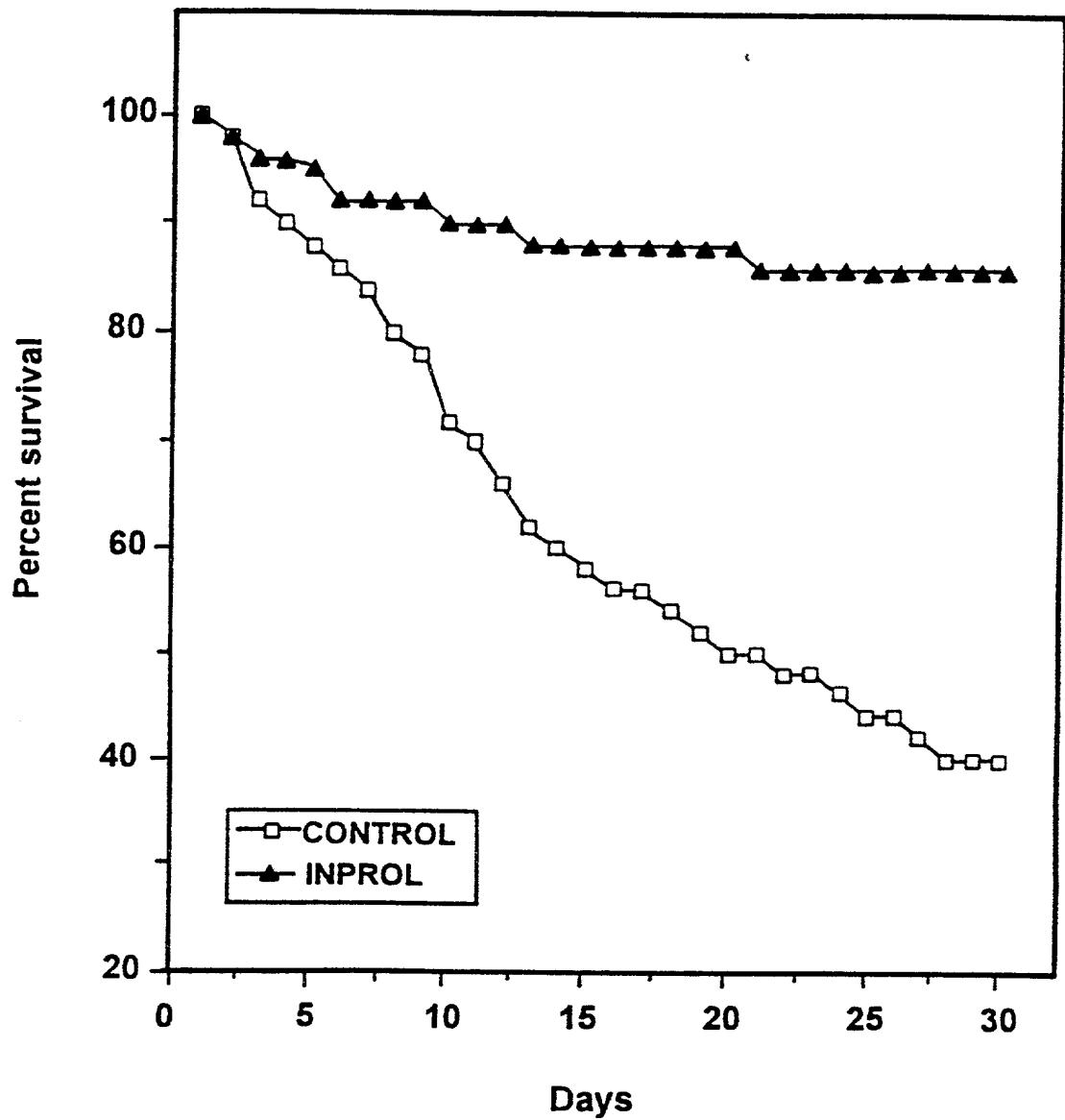
**FIG. 6**



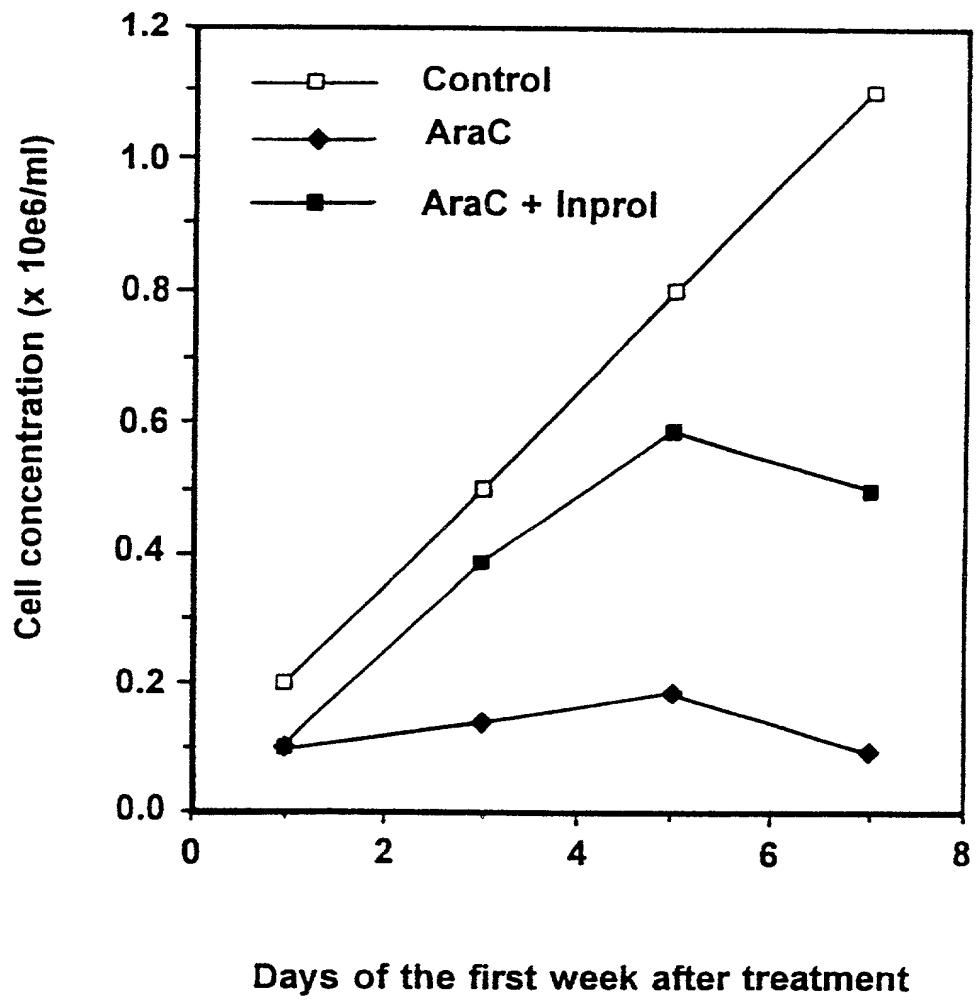
**FIG. 7**

**FIG. 8**

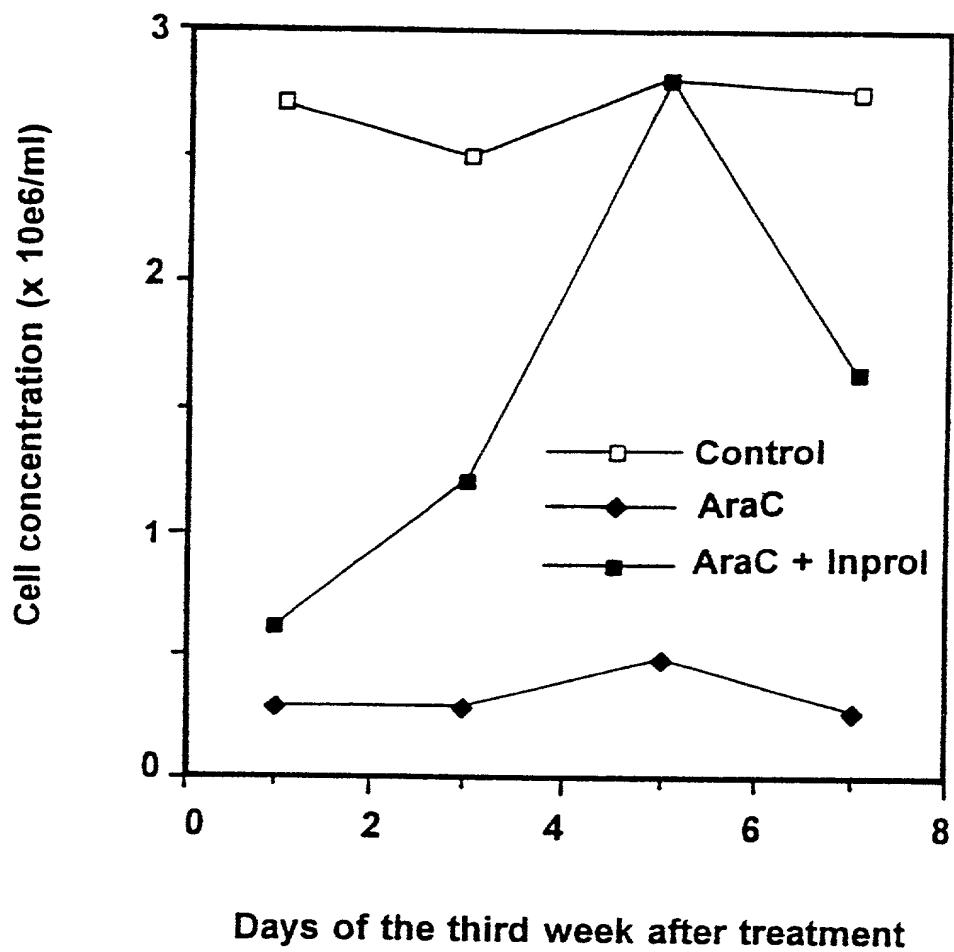




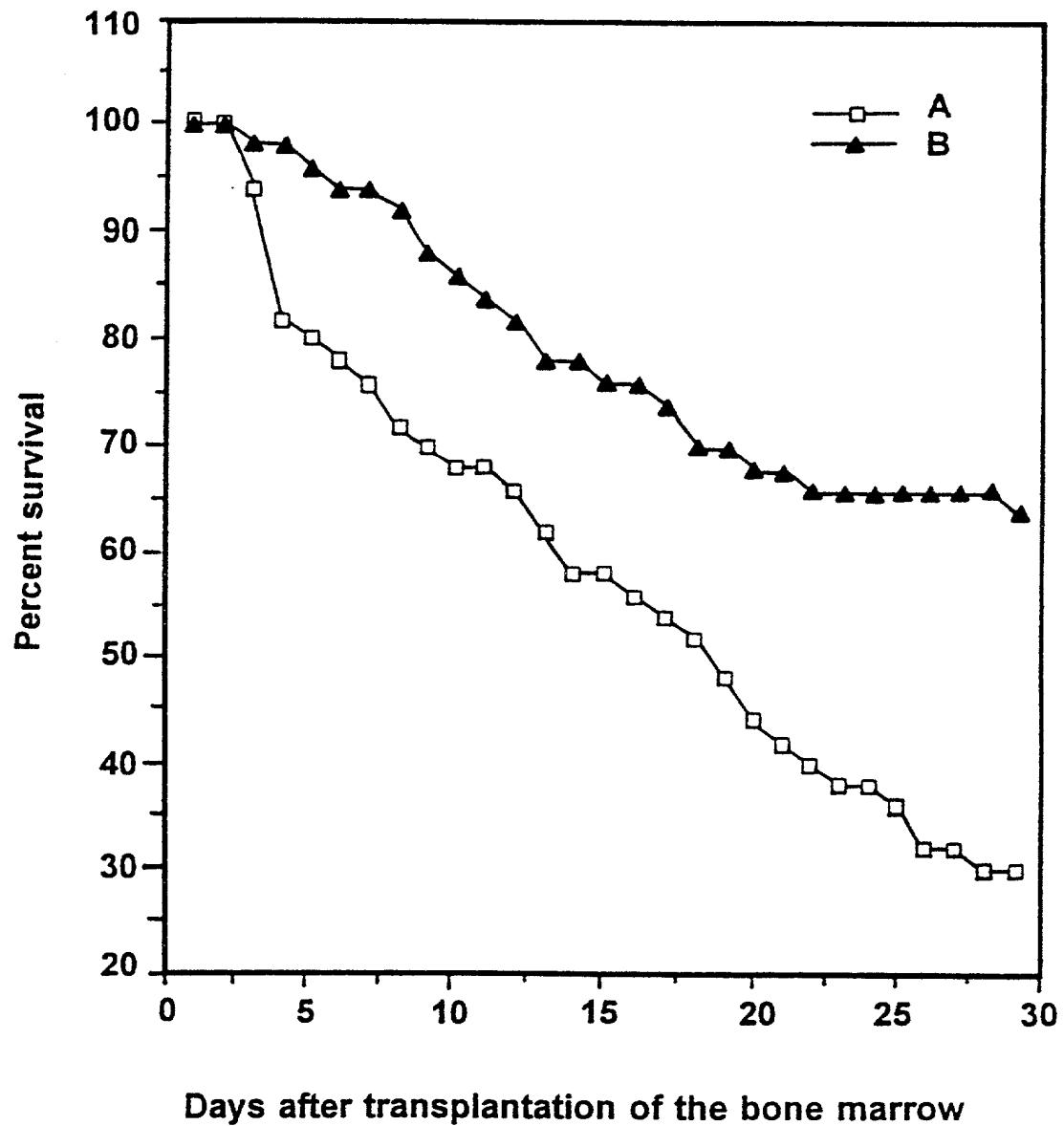
**FIG. 9**



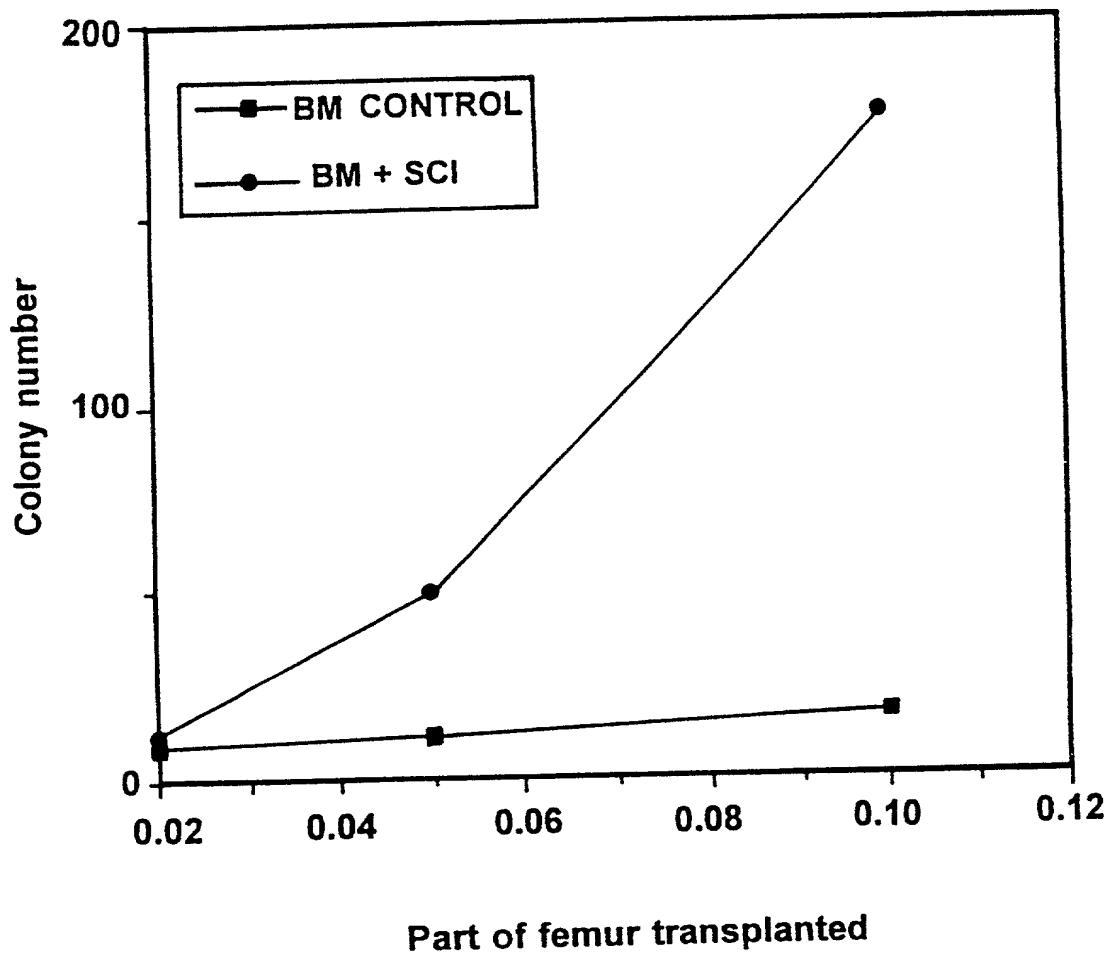
**FIG. 10A**



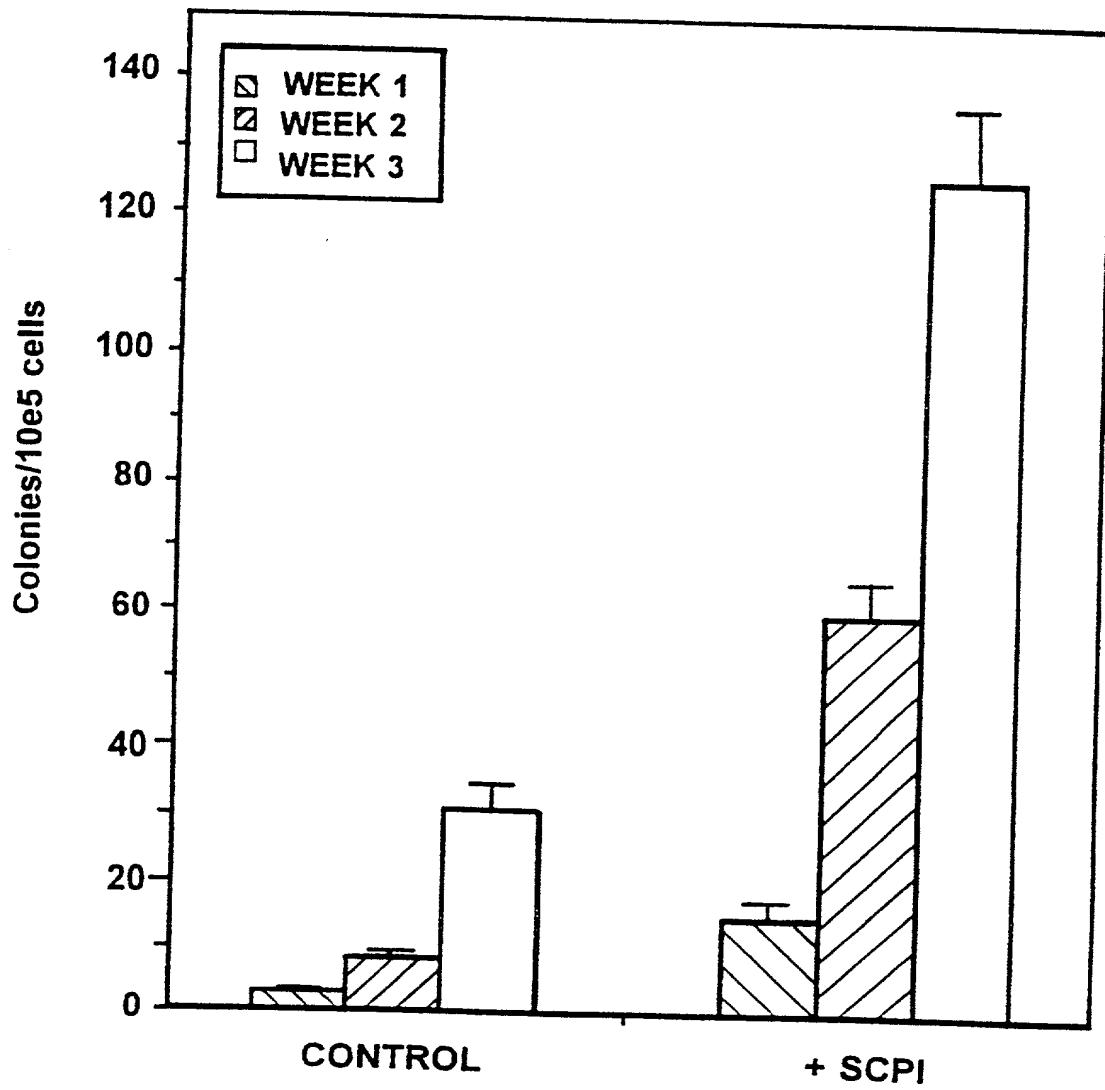
**FIG. 10B**



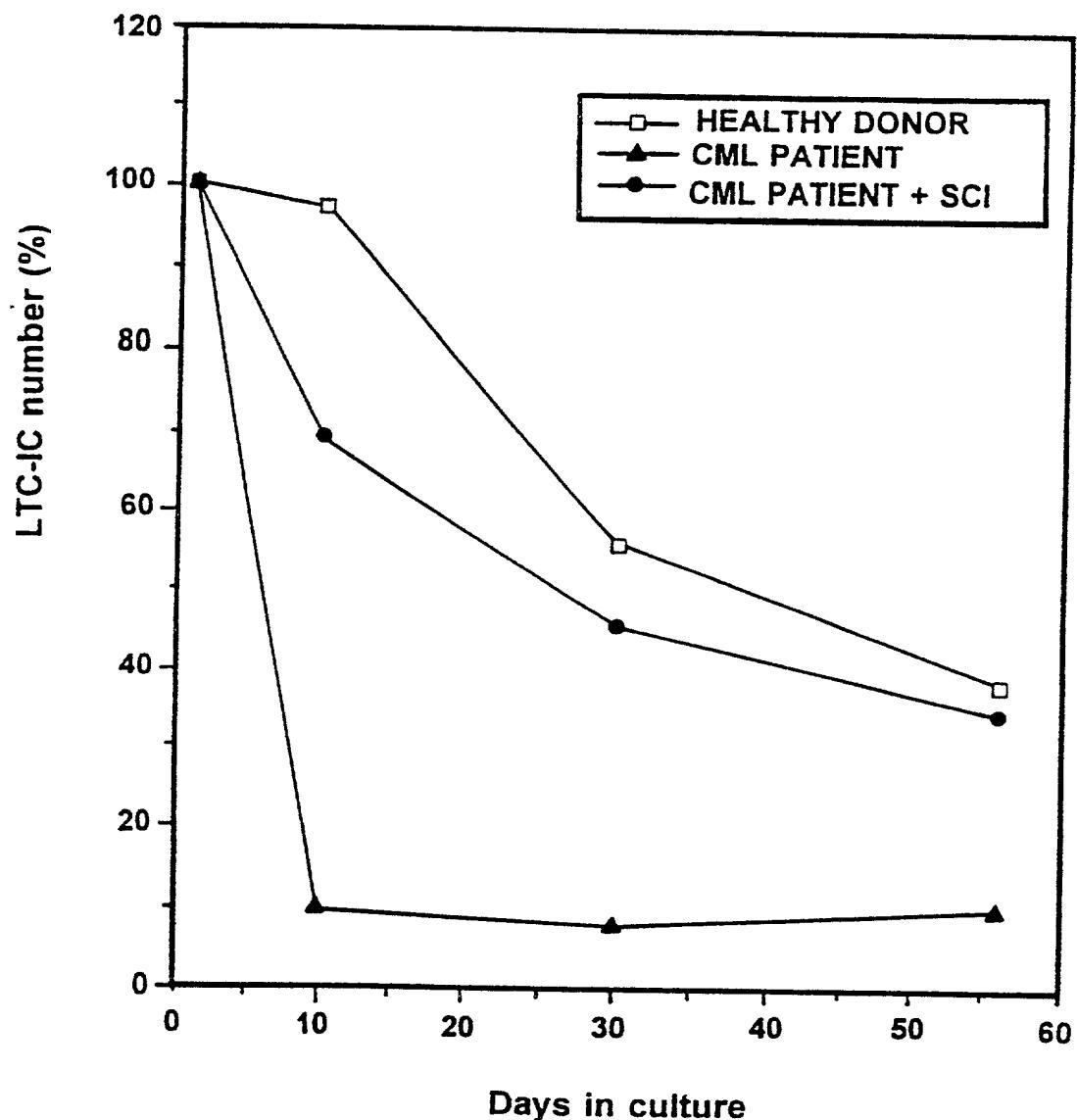
**FIG. 11**



***FIG. 12***

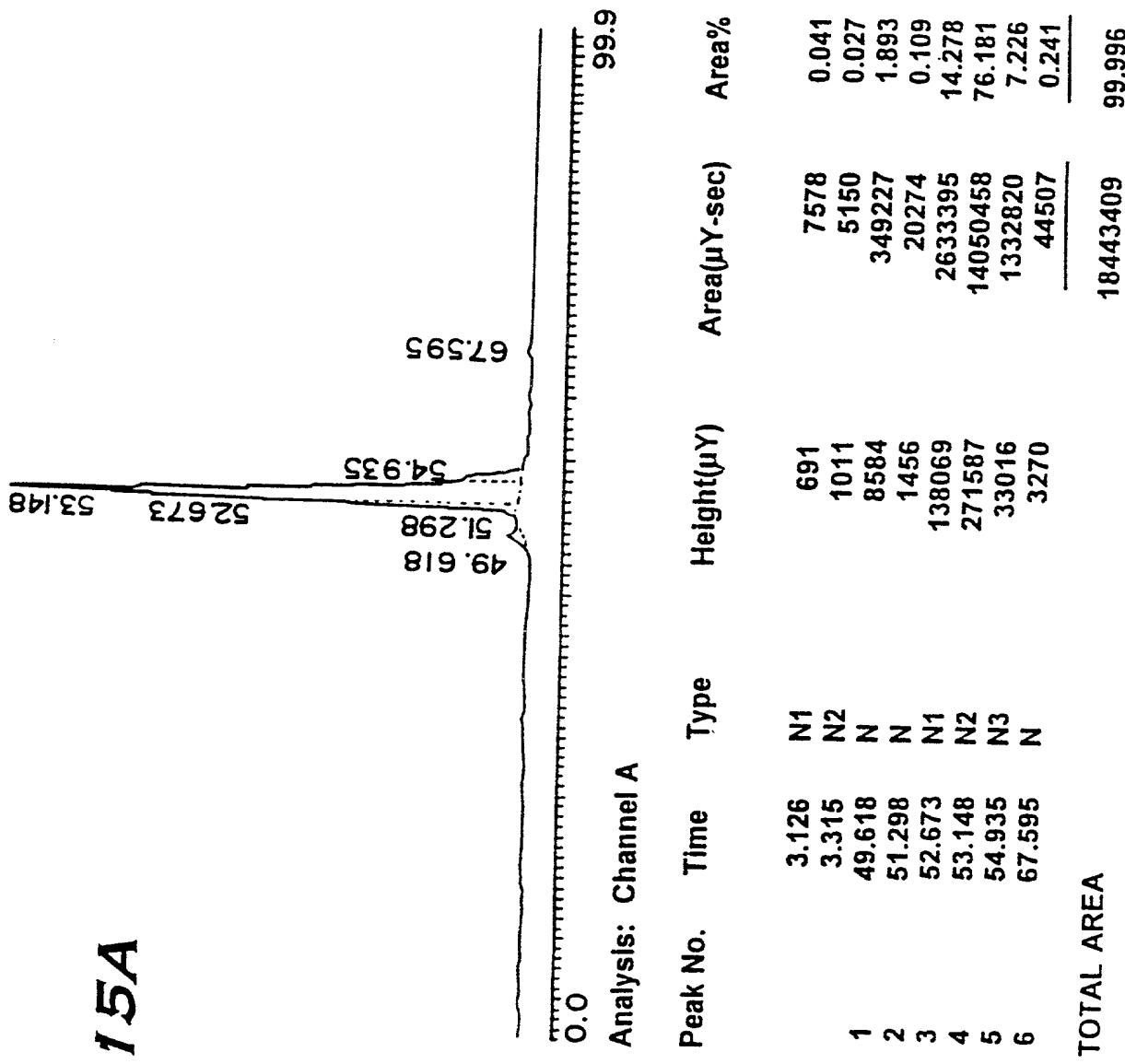


*FIG. 13*

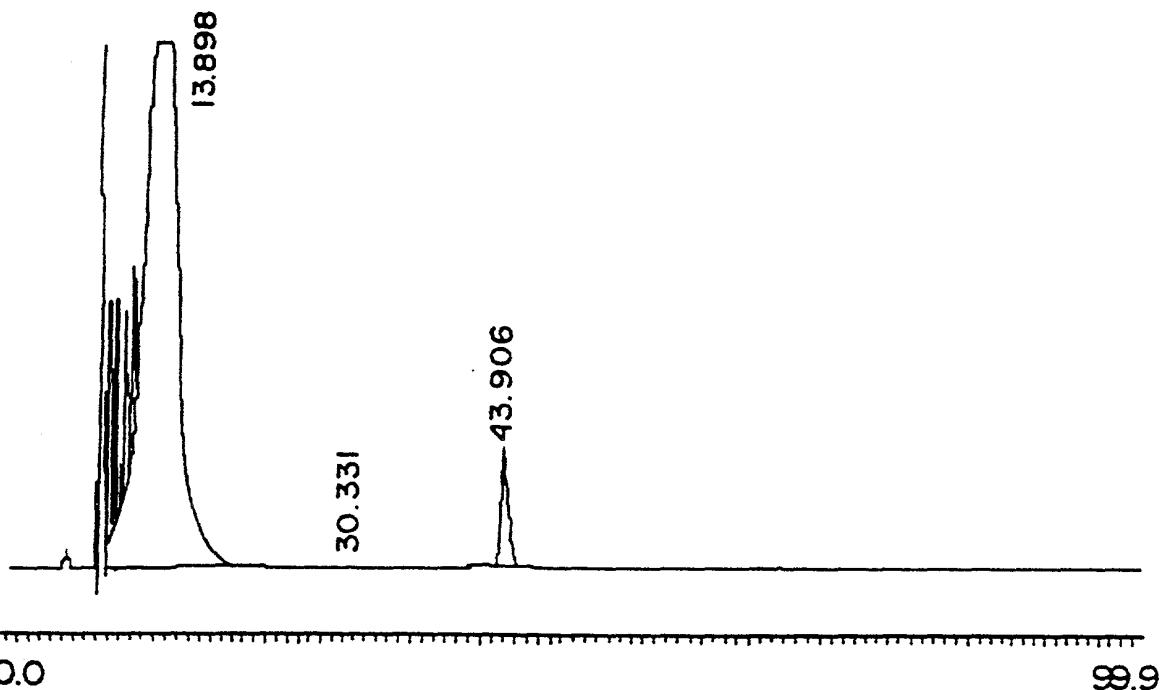


**FIG. 14**

FIG. 15A



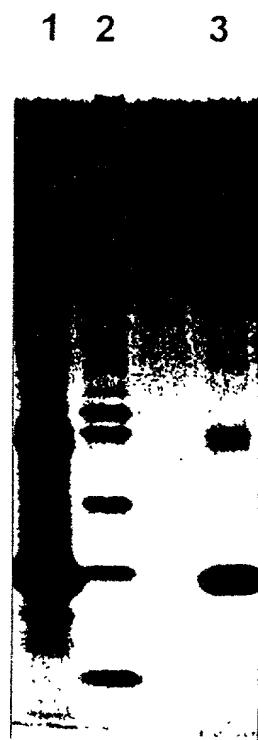
KOZLOV et al.  
Applh. No. 09/839,164  
Filed: April 23, 2001  
Figure 15A of 20



**Analysis: Channel A**

Peak No.	Time	Type	Height( $\mu$ Y)	Area( $\mu$ Y-sec)	Area%
1	4.383	N1	3945	95125	0.119
2	5.080	N2	28639	330889	0.413
3	5.216	N3	49084	531867	0.665
4	7.980	N1	399424	1110511	1.389
5	8.100	Err	1203320	2882013	3.605
6	8.241	N3	443249	1506159	1.884
7	8.386	N4	481563	2185702	2.734
8	8.533	N5	412886	1826165	2.284
9	8.701	N6	321500	842122	1.053
10	8.745	N7	404661	1610380	2.014
11	8.995	N8	435765	2489721	3.114
12	9.316	N9	517790	4801831	6.007

**FIG. 15B**



*FIG. 15C*

# FIG. 16A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Val	Leu	Ser	Pro	Ala	Asp	Lys	Thr	Asn	Val	Lys	Ala	Ala	Leu	Gly	Lys	Val	Gly	Ala	His	
GTC	CTC	TCI	CCG	GCC	GAC	AAC	ACC	GTC	GTC	GTC	GTC	GTC	GTC	TGG	GCT	AAG	GTC	GCC	GAC	
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
Ala	Gly	Glu	Tyr	Gly	Ala	Glu	Ala	Leu	Glu	Arg	Met	Phe	Leu	Ser	Phe	Pro	Thr	Thr	Lys	
GCT	GCC	GAG	GAT	GCT	GCC	GAG	GCC	GTC	GAG	GAG	GTC	TTC	CIG	ICC	TTC	CCC	ACC	ACC	AAG	
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
Thr	Thr	Pro	His	Pro	Asp	Leu	Ser	His	Gly	Ser	Ala	Gln	Val	Lys	Gly	His	Gly	Lys		
ACC	TAC	TTC	CCG	CAC	TTC	GAC	CIG	AGC	CAC	GTC	TCT	CCC	CAG	GTC	TTC	AAC	GTC	CCC	AAC	
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
Lys	Val	Ala	Asp	Ala	Leu	Thr	Asn	Ala	Val	Ala	His	Val	Asp	Asp	Met	Pro	Asn	Ala	Leu	
AAC	GTC	CCC	GAC	GTC	CIG	ACC	AAC	CCC	GTC	GTC	CAC	GTC	GAC	GAC	AIG	CCC	AAC	GCC	CIG	
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Ser	Ala	Leu	Ser	Asp	Leu	His	Ala	His	Lys	Leu	Arg	Val	Asp	Pro	Val	Asn	Phe	Lys	Leu	
TCC	CCC	CIG	ACC	GAC	CIG	CAC	CCC	GAC	CAC	CAC	GTC	GTC	GAC	CCC	GTC	AAC	TTC	AAC	CTC	
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	
Leu	Ser	His	Cys	Leu	Leu	Val	Thr	Leu	Ala	Ala	His	Leu	Pro	Ala	Glu	Phe	Thr	Pro	Ala	
CTA	AGC	CAC	TCC	TCC	TCC	GTC	GTC	GTC	GTC	GTC	GTC	CAC	CAC	GTC	GAG	TTC	ACC	CCC	GCC	
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141
Val	His	Ala	Ser	Leu	Asp	Lys	Phe	Leu	Ala	Ser	Val	Ser	Thr	Val	Leu	Thr	Ser	Lys	Tyr	Arg
GTC	CAC	CCC	TCC	CIG	GAC	AAC	TTC	CIG	GTC	GTC	TCC	TCC	TCC	TCC	ACC	TCC	TCC	AAA	TAC	CGT

KOZLOV et al.  
Applin, No. 09/839,164  
Filed: April 23, 2001  
Figure 16A of 20

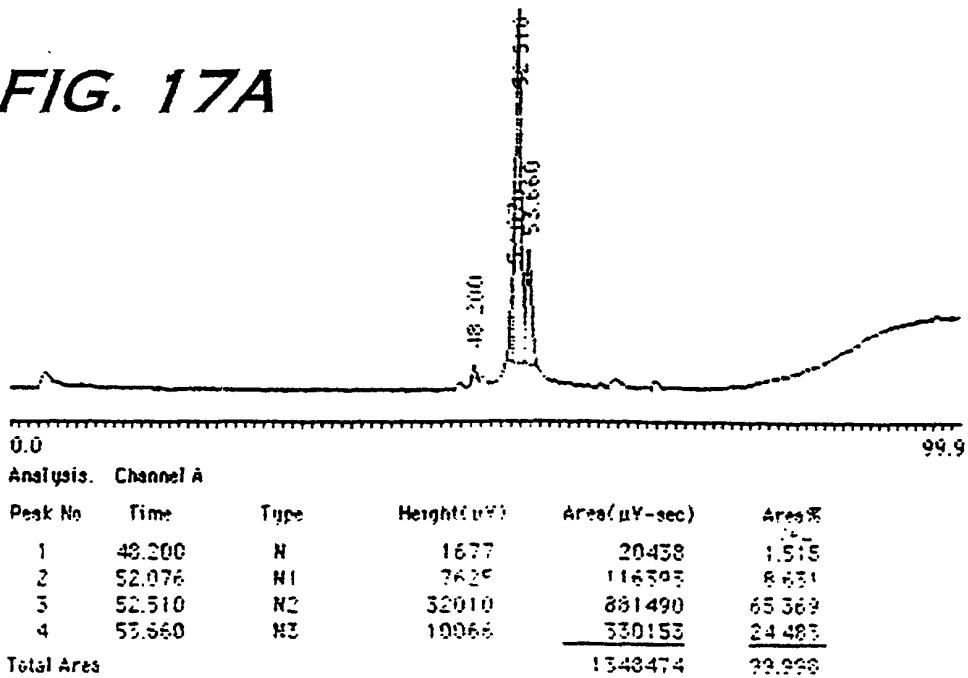
# FIG. 16B

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Val	His	Leu	Thr	Pro	Glu	Glu	Glu	Lys	Ser	Ala	Val	Thr	Ala	Leu	Thr	Gly	Lys	Val	Asn
CAC	CAC	CTG	ACT	CTT	GAG	GAG	AAC	TCT	GCC	GTC	ACT	GCC	CAC	GCG	GCT	AAC	GTC	AAC	GTC
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Asp	Glu	Val	Gly	Gly	Glu	Ala	Leu	Gly	Arg	Leu	Leu	Val	Val	Tyr	Pro	Ile	Gln	Arg	
CAI	CAA	GTC	GGT	GTC	GAC	GCC	GTC	CAC	AGC	GTC	GTC	GTC	GTC	TAC	CCT	GGG	ACC	CAG	AGC
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Phe	Pro	Glu	Ser	Phe	Gly	Asp	Leu	Ser	Thr	Pro	Asp	Ala	Val	Met	Gly	Asn	Pro	Lys	Val
TTC	TTC	GAG	TCC	TTC	CCG	CAI	CIG	TCC	ACT	CCG	TTT	CAI	GCT	GTT	ATG	GGC	AAC	CTT	AAG
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Lys	Ala	His	Gly	Lys	Lys	Val	Leu	Gly	Ala	Phe	Ser	Asp	Gly	Leu	Ala	His	Leu	Asp	Asn
AAG	CTT	CAI	GGC	AAC	AAA	GTC	CTC	GGT	GCC	TTT	ACI	GAT	GGC	CIG	GCT	CAC	CTC	GAC	AAC
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Leu	Lys	Gly	Thr	Phe	Ala	Thr	Leu	Ser	Clu	Leu	His	Cys	Asp	Lys	Leu	His	Val	Asp	Pro
CTC	AAG	GGC	ACC	TTT	CCC	ACA	CIG	AGI	GAC	CAC	TCI	GAT	AAC	CIG	CAC	CIG	GAT	CCC	CTT
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Glu	Asn	Phe	Arg	Leu	Leu	Gly	Asn	Val	Leu	Val	Cys	Val	Leu	Ala	His	Phe	Gly	Lys	
GAC	AAC	TTC	AGG	CIG	CIG	GGC	AAC	GTC	CIG	CIG	CIG	TCI	GTC	CIG	GCC	CAC	TTC	GGC	AAA
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
Glu	Phe	Thr	Pro	Pro	Val	Gln	Ala	Ala	Tyr	Gln	Lys	Val	Ala	Gly	Val	Ala	Asn	Ala	
GAA	TTC	ACC	CCA	CCA	CAC	CAC	GCT	GCC	TAT	CAG	AAA	GTC	GTC	GCT	GGT	GTC	GCT	AAI	GGC
141	142	143	144	145	146														
Leu	Ala	His	Lys	Tyr	His														
CIG	GCC	CAC	AAG	TAT	CAC														

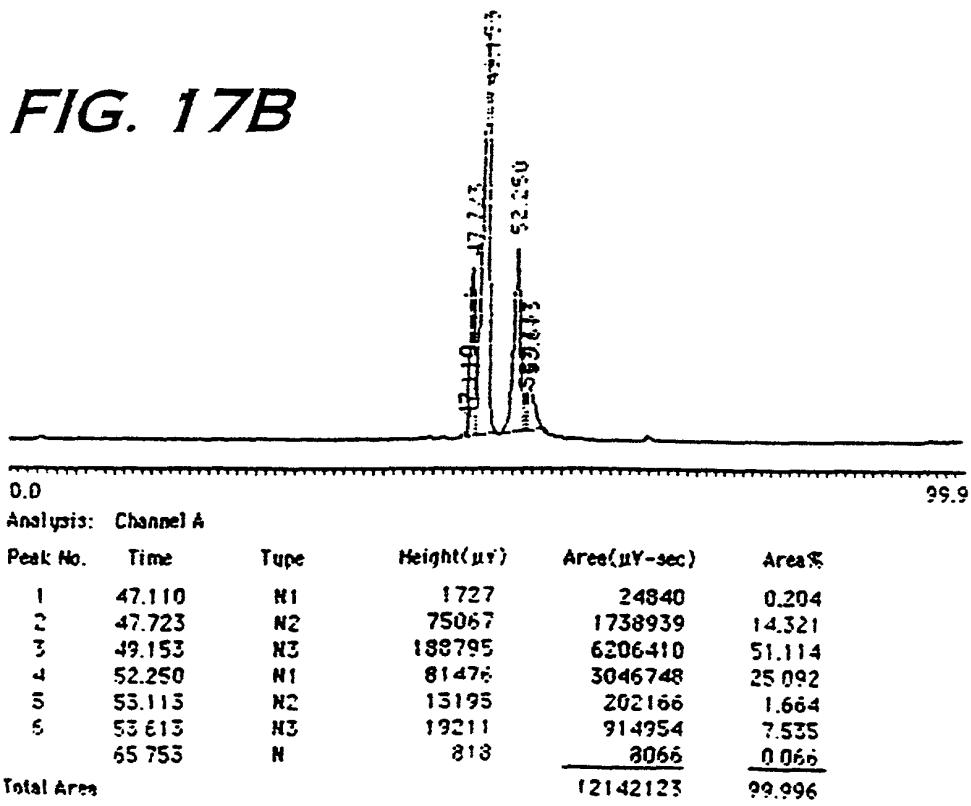
# FIG. 16C

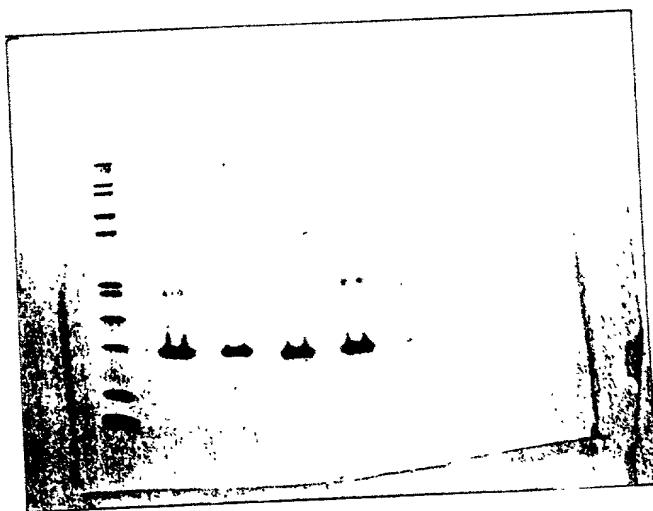
hHemA.pep	1	V- <b>I</b> SPADKIN	VIAAWGKVGA	HA- <b>G</b> EVYGAER	LE- <b>E</b> YVILSFF	TT- <b>T</b> YVPHF-	50
hHemB.pep	1	VHLTPPEEKS	VIAA <b>L</b> NGKV-	-NVDIEVGSEA	LG- <b>R</b> LLWVF	WIOR <b>E</b> ESFG-	50
mHemA.pep	1	V- <b>I</b> SEEDKSN	TKAAV-GRIGC	HC-A <b>E</b> YGAER	LE- <b>R</b> EASEF	TT- <b>T</b> YVPHF-	50
mHemB.pep	1	VHLDAEKA	VSCLGKVN	-----EVGEER	LG- <b>G</b> RLLWVF	WIOR <b>V</b> ESFG-	50
pHemA.pep	1	V- <b>I</b> SPADKIN	VIAAWGKVGA	QE- <b>G</b> EVYGAER	LE- <b>E</b> YVILSFF	TT- <b>T</b> YVPHF-	50
pHemB.pep	1	VHLSEEEKA	VIGLGRKVNV	-----EVGEA	LG- <b>G</b> RLLWVF	WIOR <b>V</b> ESFG-	50
hHemA.pep	51	DISH-----C	SAQVK <b>S</b> FEK	VADALKV-----	AVAHMDDPM	ALS-----MSDL	100
hHemB.pep	51	DLSIPD <b>AV</b> MG	NPKVKAHEK	VGA-----FSD	CAHLDNLKG	TFN-----TMSL	100
mHemA.pep	51	DYSH-----C	SAQVK <b>S</b> FEK	VADALK-----S	AGHLDLPG	ALS-----MSDL	100
mHemB.pep	51	DLSA <b>S</b> FMG	NAKVKAHEK	V-----T <b>E</b> ND	CAHLDNLKG	TFASL-----SEL	100
pHemA.pep	51	NISH-----G	SDQVKAHC <b>Q</b> K	VADALK-----	AGHLDLPG	ALS-----MSDL	100
pHemB.pep	51	DLSM <b>A</b> DAYMG	NPKVKAHEK	V-----L <b>S</b> PSD	CAHLDNLKG	TFAKL-----SEL	100
hHemA.pep	101	HAKLIRD <b>D</b> EV	NEKULLSH <b>C</b> TV	VIAAH <b>H</b> PAE	TFPAV <b>A</b> SH <b>E</b>	-KELAV <b>S</b> TV	150
hHemB.pep	101	HCOKL <b>H</b> D <b>E</b> V	NERULL <b>N</b> TV	CVAL <b>H</b> FC <b>E</b>	TFPAV <b>O</b> AO <b>Y</b>	-KVAGV <b>A</b>	150
mHemA.pep	101	HA <b>K</b> LIRD <b>D</b> EV	NEKULLSH <b>C</b> TV	VIA <b>L</b> SH <b>H</b> AD	TFPAV <b>A</b> SH <b>E</b>	-KELAV <b>S</b> TV	150
mHemB.pep	101	HCOKL <b>H</b> D <b>E</b> V	NERULL <b>N</b> TV	I <b>V</b> LCH <b>H</b> GD	TFPA <b>Q</b> AO <b>A</b>	-KVAGV <b>A</b>	150
pHemA.pep	101	HA <b>K</b> LIRD <b>D</b> EV	NEKULLSH <b>C</b> TV	VIAAH <b>H</b> PD <b>D</b>	ENPSV <b>A</b> SH <b>E</b>	-KELAV <b>S</b> TV	150
pHemB.pep	101	EDDL <b>H</b> D <b>E</b> V	NERULL <b>N</b> TV	V <b>M</b> ARR <b>G</b> HD	ENPD <b>Q</b> AO <b>A</b>	-KVAGV <b>A</b>	150
hHemA.pep	151	DISKVR	...	...	...	...	200
hHemB.pep	151	LAHKYH	...	...	...	...	200
mHemA.pep	151	DISKVR	...	...	...	...	200
mHemB.pep	151	LAHKYH	...	...	...	...	200
pHemA.pep	151	DISKVR	...	...	...	...	200
pHemB.pep	151	LAHKYH	...	...	...	...	200

**FIG. 17A**

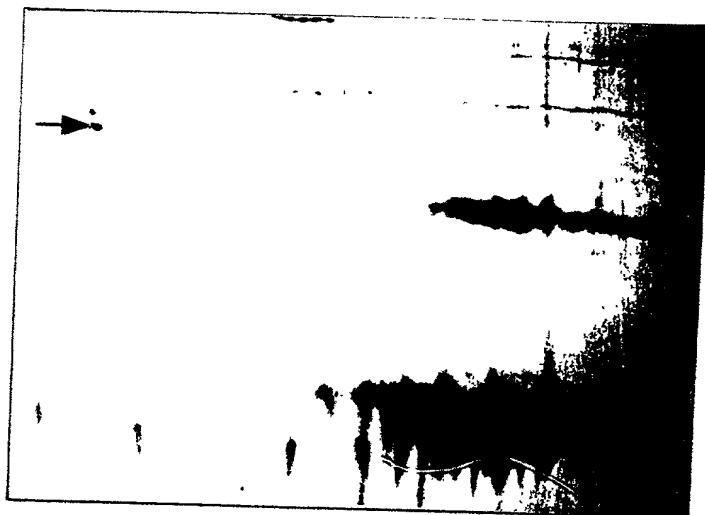


**FIG. 17B**

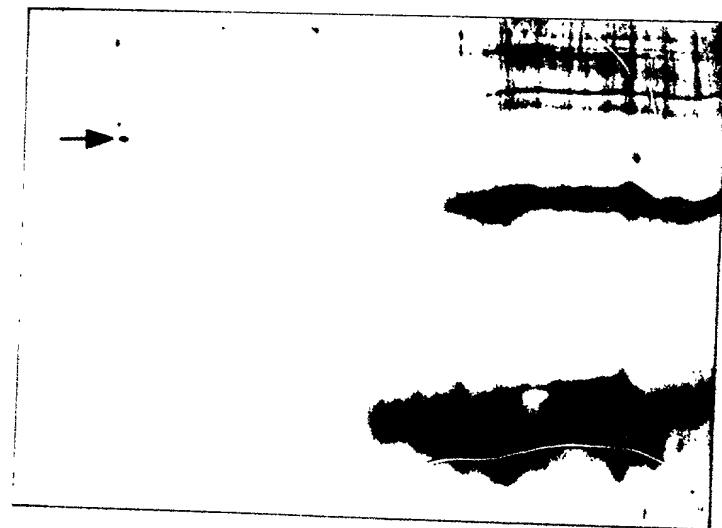




***FIG. 18***



*FIG. 19A*



*FIG. 19B*

FIG. 20

